

CLAIMS

1. Packaging (1) for protecting and locating a circular contour object such as an eyeglass lens (18), the packaging including:

5           - a bottom panel (2);

          - two box-sections (3) each including an external lateral panel (10) and an internal lateral panel (13) that includes an opening (15) for at least partial insertion of the object, each box-section (3) being attached by an articulation (14) to the bottom panel (2) along a respective one of two opposite edges (7), each box-section (3) being adapted to assume a folded down position in which the external lateral panel (10) is in line with the bottom panel (2) and a raised position in which the external lateral panel (10) upstands relative to the bottom panel (2);

          - two flaps (4, 5) each attached by an articulation (29, 30) to the bottom panel (2) along a respective one of two opposite edges (27, 28) adjacent the box-sections (3), each flap (4, 5) being adapted to assume a folded down position in which it is in line with the bottom panel (2) and a raised position in which the flap (4, 5) upstands relative to the bottom panel (2), against the longitudinal ends of the box-sections (3); and

25           - means for maintaining the box-sections (3) and the flaps (4, 5) in the raised position;

          characterized in that, for each box-section (3), said external lateral panel (10) has a first end connected by an articulation (14) to the bottom panel (2), a second end connected by an articulation (9) to a first end of an intermediate panel (11), the latter also including a second end connected by an articulation (12) to a first end of said internal lateral panel (13), the latter also including a second end connected by an articulation (52) to the bottom panel (2) along the articulation (14)

between the first end of the external lateral panel (10) and the bottom panel (2), and in that at least one locating tongue (20, 21) is disposed in the opening (15) and attached to the internal lateral panel (13) only by an end opposite the bottom panel (2).

2. Packaging according to claim 1, characterized in that it is made in one piece.

3. Packaging according to claim 1 or claim 2, characterized in that the bottom panel (2) is square.

4. Packaging according to any one of claims 1 to 3, characterized in that four locating tongues (20, 21) are disposed in each opening (15) in the internal lateral panels (13), each locating tongue (20, 21) being independent of the others and attached to the bottom panel (2) at one end.

5. Packaging according to any one of claims 1 to 4, characterized in that the locating tongues (20, 21) include at least one transverse scoring line (25) over their length.

6. Packaging according to any one of claims 1 to 5, characterized in that each box-section (3) is formed in one piece with the bottom panel (2) by a rectangular panel connected by a first scoring line (14) to the edge (7) of the bottom panel (2), said rectangular panel including a second scoring line (9) delimiting the external lateral panel (10), a third scoring line (12) delimiting the intermediate panel (11), a fourth scoring line (52) delimiting the internal lateral panel (13), and said rectangular panel extending beyond the fourth scoring line (52) by way of a fixing flap (53) fastened to the bottom panel (2) so that the fourth scoring line (52) is juxtaposed to the first scoring line (14).

7. Packaging according to claim 6, characterized in that the fixing flap (53) is glued to the bottom panel (2).

8. Packaging according to any one of claims 1 to 7, characterized in that the intermediate panel (11) includes a longitudinal scoring line (54).

5 9. Packaging according to any one of claims 1 to 8, characterized in that the width of the external lateral panel (10) is substantially equal to the width of the internal lateral panel (13).

10 10. Packaging according to claim 8, characterized in that the width of the external lateral panel (10) is substantially equal to the width of the internal lateral panel (13) and said longitudinal scoring line (54) is disposed substantially along the longitudinal median line of the intermediate panel (11).

15 11. Packaging according to any one of claims 1 to 10, characterized in that the means for holding the box-sections (3) and the flaps (4, 5) in the raised position include means (32) associated with the flaps (4, 5) and with the box-sections (3) to hold the box-sections (3) in the raised position when the flaps (4, 5) are in the  
20 raised position and means (6, 43, 46) for holding the flaps (4, 5) facing each other against the box-sections (3).

25 12. Packaging according to any one of claims 1 to 11, characterized in that the means for holding the box-sections (3) and the flaps (4, 5) in the raised position include a closure panel (6) articulated to the free edge of one of the flaps (5), this closure panel (6) including attachment means (39, 46) to the box-sections (3) and to the opposite flap (4) so as to be able to assume a closure  
30 position in which it is parallel to the bottom panel (2) and positioned against the box-sections (3) and the free edge of the opposite flap (4) when the latter are in the raised position.

35 13. Packaging according to claim 12, characterized in that the closure panel (6) includes, beyond a scoring

line (44) and starting from its end opposite the flap (5) to which it is articulated, a fold-down panel (43) adapted to be superposed on the opposite flap (4) when the closure panel (6) is in the closure position.

5           14. Packaging according to either claim 12 or claim 13, characterized in that said attachment means comprise attachment tongues (39, 46) projecting from the edges of the closure panel (6), the box-sections (3) and the opposite flap (4) including notches (42, 48) adapted to  
10 cooperate with the attachment tongues (39, 46).

          15. Packaging according to any one of claims 1 to 14, characterized in that the flaps (4, 5) are each attached to the adjacent longitudinal ends of the box-sections (3) by two gussets (32).

15           16. Sheet material packaging blank (34) characterized in that it comprises:

          - a bottom panel (2);  
          - two external lateral panels (10) connected by a scoring line (14) to two opposite edges (7) of the bottom  
20 panel (2);

          - two flaps (4, 5) each connected by a scoring line (29, 30) to a respective one of the other two edges (27, 28) opposite of the bottom panel (2);

          - two intermediate panels (11) connected by a scoring line (9) to each of the opposite edges of the  
25 bottom panel (2) of the two external lateral panels (10);

          - two internal lateral panels (13) each connected by a scoring line (12) to a respective one of said intermediate panels (11) at the edge thereof opposite the  
30 external lateral panel (10), each internal lateral panel (13) being extended, in the direction away from the intermediate panel (11), by a fixing flap (53), the internal lateral panels (13) further including a cut-out (15) delimiting at least one tongue (20, 21) remaining  
35 attached to the rest of the panel (13) by one of its ends

(22);

- a closure panel (6) with dimensions substantially equal to those of the bottom panel (2) and connected by a scoring line (38) to an edge opposite the bottom panel (2) of one of the flaps (5).

17. Packaging blank according to claim 16, characterized in that the closure panel (6) further includes a fold-down panel (43) connected by a scoring line (44) to the edge (45) opposite the flap (5) of the closure panel (6).

18. Packaging blank according to claim 16 or claim 17, characterized in that it includes attachment tongues (39, 49) connected by a scoring line (41, 47) to the free edges of the closure panel (6).

19. Packaging blank according to any one of claims 16 to 18, characterized in that the width of the external lateral panel (10) and the width of the internal lateral panel (13) are substantially equal.

20. Packaging blank according to any one of claims 16 to 19, characterized in that the external lateral panels (10) and the flaps (4, 5) are connected in pairs at their ends adjacent the bottom panel (2) by a gusset (32).

21. Packaging blank according to any one of claims 16 to 20, characterized in that the widths of each of the flaps (4, 5) and of each of the external lateral panels (10) are substantially equal.

22. Method of packaging and positioning a circular contour object (18), the method employing packaging (1) according to any one of claims 1 to 15, characterized in that it selects a combination of packaging and object to be packaged in which the bottom panel (2) is a square whose side length is substantially equal to the diameter of the object (18).